

ABSTRACT

A zero-IF receiver includes an adaptive filter that is enabled when intermodulation distortion is detected. The adaptive filter is configured as a notch filter that is centered at the location of the second-order intermodulation distortion, which, in a zero-IF receiver, is at zero Hertz. In a preferred embodiment, the frequency response of the high pass filter that is typically used in a conventional zero-IF receiver is adjusted when intermodulation distortion is detected. Preferably, the detection of the intermodulation distortion is based on one or more of the digital baseband signals, for ease of implementation, but analog processing may also be employed.